

Kane County
Building Permit Packet
180 West 300 North, Kanab, UT.
(435)644-4985 fax (435)644-4963

To Whom It May Concern:

Enclosed in the building permit packet for Kane County is a permit application, requirement check list, soils test forms, owner/builder agreement, a fee schedule and general information. If you are planning to use a contractor, please disregard the owner/builder application. However, if you are an owner/builder the form needs to be notarized and the original sent to our office. If you live out of state you may have the owner/builder agreement notarized in your state. If at any time something changes on the permit application i.e. the general contractor changes to an owner/builder, the owner/builder changes to a general contractor, the engineer or architect changes, etc., a new permit application must be submitted with the correct and updated changes. This will insure that if there are any concerns, questions or violations the correct people are contacted.

To obtain a permit you must complete and submit the building permit application, signed requirement check list and all other required forms and documents. When you submit your application and documents, a non refundable plan review fee must be paid; the amount paid will be applied toward the total permit price. If any items are omitted or incomplete it will delay the process of obtaining your building permit. Please note that some documents are required to be submitted with two copies. These will be outlined in the packet.

This packet is subject to changes as requirements and code changes are adopted. It is important that you read and understand this packet and the minimum requirements needed to obtain and hold a building permit. Your signature on the permit application and requirement check list states that you have read and understand what is in the packet and that you will build according to the Kane County Ordinance and adopted building codes.

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by the adopted building codes, or cause the same to be done, in conflict with or in violation of any provisions of the adopted building codes.

If you have questions you may contact our office between the hours of 8:00 A.M and 5:00 P.M. Monday through Friday at 435-644-4985.

Kane County Building Department
Building Permit Packet

Revised 02/12/2010

BUILDING PERMIT APPLICATION

PURPOSED WORK: Residence () Commercial () Storage () Garage () Other _____

VALUATION OF PURPOSED WORK: _____

OWNER OF PROPERTY: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____

LEGAL DESCRIPTION OF PROPERTY: _____

OWNER'S MAILING ADDRESS: _____

OWNER'S PHONE NUMBER: _____

ARCHITECT OR ENGINEER: _____ LICENSE # _____

ADDRESS: _____

PHONE NUMBER: _____

GENERAL CONTRACTOR: _____ LICENSE # _____

ADDRESS: _____

PHONE NUMBER: _____

ELECTRICAL CONTRACTOR: _____ LICENSE # _____

ADDRESS: _____

PHONE NUMBER: _____

PLUMBING CONTRACTOR: _____ LICENSE # _____

ADDRESS: _____

PHONE NUMBER: _____

MECHANICAL CONTRACTOR: _____ LICENSE # _____

ADDRESS: _____

PHONE NUMBER: _____

OWNER'S OR AUTHORIZED AGENT'S SIGNATURE: _____

DATE: _____

OWNER/BUILDER: YES NO SETBACKS: FRONT _____ SIDE _____ SIDE _____ REAR _____

HOW MANY DWELLINGS ON PROPERTY _____ HOW MANY STRUCTURES ON PROPERTY _____

LAND USE AUTHORITY APPROVAL

Property Zone: _____ Approved: _____ Not Approved: _____

Comments: _____

Land Use Authority: _____ Date: _____

Requirements for Building Permit Application

Kane County Building Department 435-644-4985

Kane County Land Use Authority 435-644-4901

180 West 300 North, Kanab, Utah 84741

Prior to issuance of a building permit a completed application and required supporting documentation must be reviewed and approved by the Kane County Building Department and the Kane County Land Use Authority.

After the completed application is received, please allow 10 working days for review, approval and issuance of the building permit.

Following is a list of required documentation to be attached to the application:

Building Department

- _____ 1. Application
- _____ 2. Site Plan (2 copies)
- _____ 3. Construction Drawings (2 copies)
- _____ 4. Wildland Urban Interface (WUI) Plan (2 copies)
- _____ 5. Owner Builder Certificate
- _____ 6. Septic Permit
- _____ 7. Locate and Stake Property Corner Pins
- _____ 8. Proof of Water
- _____ 9. Res and/or Com check (2 copies)

Land Use Authority

- _____ 1. Parcel properly subdivided
- _____ 2. Recorded means of access minimum 28 ft.
- _____ 3. Approved Water Supply
 - _____ Well (2,000 Gal. Storage tank is also recommended)
 - _____ Private System
 - _____ Public System
- _____ 4. Wildland Urban Interface (WUI) Roads
- _____ 5. Site Plan, Include easements to parcel
- _____ 6. Land Use Zone _____

Dry Subdivision Requirements

- _____ 1. Minimum 2,000 gallon water tank
- _____ 2. Proof of water hauling contract, or
- _____ 3. Receipt for tank, trailer and approved water source

Detailed descriptions and additional explanations of requirements are included in this packet.

MY SIGNATURE BELOW INDICATES THAT I HAVE CAREFULLY READ AND UNDERSTAND THE PERMIT PACKET AND VERIFIED THAT ALL OF THE ABOVE ITEMS HAVE BEEN INCLUDED WITH MY PERMIT APPLICATION. I HAVE CHECKED EACH ITEM OR INDICATED N/A FOR ITEMS THAT DO NOT APPLY, AND HAVE INSURED THAT MY APPLICATION AND PLANS ARE COMPLETE. I ALSO UNDERSTAND THAT IF ANY ITEMS ARE DETERMINED TO BE OMITTED OR INCOMPLETE I WILL BE REQUIRED TO CORRECT OR SUPPLY THE DOCUMENT PRIOR TO THE BUILDING PERMIT BEING APPROVED.

Signature_____ Date_____

Kane County Building Department
180 West 300 North
Kanab, Utah 84741
Office# (435) 644-4985
Fax# (435) 644-4963

Owner/Builder Certification
and
Agreement to comply with the
Construction trades Licensing Act

Name of Owner/Builder: _____

Address: _____

City, State, Zip: _____

Location of Construction Site

Address: _____

City, State, Zip: _____

Subdivision Name: _____

CERTIFICATION

I, _____, certify under penalty that the following statements are true and correct and are based upon my understanding of the Utah Construction Trades Licensing Act:

1. I am sole owner of the property and construction project at the above describe location.
2. The improvements being placed on the property are intended to be used and will be used for my personal non-commercial, non public use.
3. I understand that work performed on the project, if it is the type of which is regulated under the Construction Trades and License Act, and Rules of the Contractor's Licensing Board, must be performed by the following:
 - A. My self the sole owner property; or
 - B. A licensed contractor; or
 - C. My employee(s) on whom I have worker's compensation insurance coverage, on whom I withhold and pay all required payroll taxes, and with respect to whom I comply with all other applicable employee/employer laws; or
 - D. Any other person working under my supervision as owner/builder to whom no compensation is paid.
4. I understand that if I retain the service of an unlicensed contractor or compensate an unlicensed person, other than as an employee for wages, to perform construction services for which licensure is required, I may be guilty of a class A misdemeanor and may be additionally subject to an administrative fine in the maximum of \$2,000 for each day on which I violate the law.

Dated this _____ day of _____, 20____

Signature of Owner/Builder

Subscribed and sworn before me this _____ day of _____, 20____, in the County of Kane, State of Utah.

Notary Public

My commission expires

KANE COUNTY BUILDING DEPARTMENT

180 West 300 North
Kanab, UT 84741
(435)644-4985 – Fax (435)644-4963

GEOTECHNICAL DATA & COMPLIANCE REPORT
Backfill and Final Grade

Name on Building Permit _____

Physical Address of Property: _____

Building Permit Number _____ Tax I.D. #: _____

Lot #: _____ Block #: _____ Subdivision: _____

Section _____; Township _____ South; Range _____ West

General Contractor: _____

COMPLIANCE

I, _____, having performed the soils testing and compaction testing of the backfill in accordance with the International Residential Code, and/or IBC hereby verify that the site described above is suitable for the construction of:

(Dwelling) (Manufactured House) (Commercial) (Industrial) (Other)

Basement: Yes/No

Number of Stories: 1 2 3

Site Classification: A B C D E

Soil Bearing Capacity (*psf*) _____

Percent of Final Grade (slope) _____

Site Preparation Recommendation: (attach if necessary) _____

Testing Results (compaction percentage, attach test) _____

I, _____, by affixing my signature and professional stamp, verify inspection, soil testing, compaction testing, meets or exceeds the engineering practices and standards needed to comply with the recommendation of the soils and geotechnical investigation, for the backfill, and proper grade away from said building to meet or exceed the codes as adopted by the State of Utah.

Engineer Signature

Affix Engineer's Wet Stamp Above

KANE COUNTY BUILDING DEPARTMENT

180 West 300 North

Kanab, Utah 84741

(435)644-4985 – Fax (435)865-5359

**GEOTECHNICAL DATA & COMPLIANCE REPORT
Prior to Footing and Foundation**

Name on Building Permit _____

Physical Address of Property: _____

Building Permit Number _____ Tax I.D. # _____

Lot #: _____ Block #: _____ Subdivision: _____

Section _____ Township _____ South; Range _____ West

General Contractor: _____

COMPLIANCE

(FIRM NAME) _____, having performed the soils testing and compaction testing of the footings and foundation pad in accordance with the International Residential Code, and/or IBC hereby verify that the site described above is suitable for the construction of:

(Dwelling) (Manufactured House) (Commercial) (Industrial) (Other)

Basement: Yes/No

Number of Stories 1 2 3

Site Classification A B C D E

Soil Bearing Capacity (*psf*) _____

Site Preparation Recommendation: (attach if necessary) _____

Testing Results: (compaction percentage, attach test results) _____

I, _____, by affixing my signature and professional stamp, verify inspection, soil testing, compaction testing, for footings and foundation, and/or structural pad preparation, meets or exceeds the engineering practices and standards needed to comply with the recommendation of the soils and geotechnical investigation, for the purpose outlined above.

Engineer Signature

Affix Engineer's Wet Stamp Above

BUILDING DEPARTMENT FEE SCHEDULE

Description	Fee	Red Tag/Stop Work Notice
Pool	\$200.00	Automatic \$200.00 fine. If no action is taken to correct and/or abate the violation within 30 days an additional fine of \$100.00 per week will be assessed until such action is taken.
Sign	\$20.00	
Demolition	\$100.00	
Residential Plan Review	\$100.00	
Commercial Plan Review	45% of Permit Price	
Accessory Bldg Plan Review	\$20.00	<u>Note:</u> Refunds for permits issued will be limited to 80 percent of the permit costs, not later than 90 days after the date of fee payment. No refunds for plan review costs will be given if the plan review has been completed.
WUI (once per parcel)	\$225.00	
Permit Renewal	\$100.00	
Permit Extension	\$15.00	
		<u>Note:</u> All plan review fees must be paid when the application is submitted, the amount paid will be applied toward the total permit costs.

<u>Total Valuation</u>	<u>Fee</u>
\$1.00 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the \$500 plus \$3.05 for each additional \$100 or fraction thereof to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the \$2,000 plus \$14.00 for each additional \$1,000 or fraction thereof to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the \$25,000 plus \$10.10 for each additional \$1,000 or fraction thereof to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the \$50,000 plus \$7.00 for each additional \$1,000 or fraction thereof to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the \$100,000 plus \$5.60 for each additional \$1,000 or fraction thereof to and including \$500,000
\$500,001 to \$1,000,000	\$3,233.75 for the \$500,000 plus \$4.73 for each additional \$1,000 or fraction thereof to and including \$1,000,000
\$1,000,001 and up	\$5,608.75 for the \$1,000,000 plus \$3.65 for each additional \$1,000 or fraction thereof

<u>Other Inspection Fees:</u>	
1. Inspections for which no fee is specifically indicated. (minimum charge - one hour)	\$56.40 per hour
2. Inspections outside of normal business hours. (minimum charge - two hours)	\$56.40 per hour
3. Re-inspection fees assessed under provisions of Section 305.8.	\$56.40 per Inspection *
4. Residential Inspection outside of jurisdiction.	\$56.40 per Inspection, plus mileage
5. Commercial Inspection outside of jurisdiction.	\$112.00 per Inspection, plus mileage
6. Additional plan review required by changes, additions or revisions to plans. (minimum charge - 1/2 hour)	\$56.40 per hour *
7. For use of outside consultants for plan checking and inspections or both.	Actual Cost **
8. Residential plan reviews outside jurisdiction.	30% of permit fee
9. Commercial plan reviews outside jurisdiction.	65% of permit fee

* Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

** Actual costs include administrative and overhead costs.

Code Requirements for Building Permit and Inspections

- R105.1** **Required.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.
- R105.8** **Responsibility.** It shall be the duty of every person who performs work for the installation or repair of building, structure, electrical, gas, mechanical or plumbing systems, for which this code is applicable, to comply with this code.
- R106.3.1** **Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved in writing or by stamp. One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or his or her authorized representative.
- R106.4** **Amended construction documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.
- R109.3** **Inspection requests.** It shall be the duty of the permit holder or their agent to notify the building official that such work is ready for inspection. It shall be the duty of the person requesting any inspection required by this code to provide access to and means for inspection of such work.
- R109.4** **Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.
- R110.1** **Use and occupancy.** No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.
- R321.1** **Premises identification.** Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property.

Adopted Building Codes By Utah Law 58-56-4 and R156-56-701

The following codes together with any amendments have been adopted by Kane County. For regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy and use of all buildings or structures in Kane County.

2006 International Building Code (IBC), including Appendix J
2006 International Residential Code (IRC), Including Appendix E
2006 International Plumbing Code (IPC)
2006 International Mechanical Code (IMC)
2006 International Energy Conservation Code (IECC)
2006 International Fuel Gas Code (IFGC)
2006 Utah Wildland Urban Interface Code (UWUI)
2008 National Electrical Code (NEC)
Housing and Urban Development Code (HUD)

If any of the above codes reference other codes those codes shall be considered part of the requirements of that code to the prescribed extent of each such reference.

Building Permits will only be issued when the following criteria is met

1. Submit all required applications, documents, forms and plans.
2. Approval of the Building Official.
3. Approval of the Land Use Authority.
4. Septic system approved by the Southwest Utah Health Department.
5. Water system approved by the Utah State Water Engineer.
6. Legal access to the property where the easement is specifically reserved and does not go through private property unless an easement is specifically reserved and meets the Kane County Standard Specification and Drawing Designs and the Utah Wildland Urban Interface Code.
7. Proof of ownership, either a recorded deed or contract.
8. Soils test and compaction test performed by a qualified engineer with recommendations, follow up inspection and notice of compliance with recommendations. This must be completed and the report received before or during the footing inspection. There are two geotechnical data and compliance forms in the packet that must be used and submitted along with the qualified engineer's report. Any new commercial, residential and anything attached to them is required to have these test performed and supplied. However, not every project requires a soil and compaction test, if you have any questions or concerns on your project contact our office.
9. Manufactured homes brought into the county must be rated for the area to insure it will meet the current energy provisions outlined in code. They must also be allowed according to the provisions in the Kane County Ordinance.

Details for the Requirement Check List

Building Department

- A. **Completed Permit Application.** This must include name, address, telephone number of the owner, builder/contractor, engineer, architect, etc.
- B. **Plot/Site Plan (two copies).**
 1. Scale of plan, and direction of north point.
 2. Lot lines, setbacks, adjacent streets, roads and rights-of-ways.
 3. Location of all existing structures on subject property and adjoining

- properties, with utility lines, poles, septic tank and field, etc., fully dimensioned.
4. Location of proposed construction and improvements, with location and dimension of all signs.
 5. Necessary explanatory notes.
- C. **Construction Plans (two copies).** Depending on the use, location, size, shape, and building official's discretion these plans may be required to be designed and stamped by a licensed engineer. If you have any concerns or question regarding engineering contact our office.
1. Footings Detail
 2. Foundation with structural detail schedule and elevations.
 3. Floor plans, with room size and partitions, cross section
 4. Referenced to use of insulation system proposed R-38 minimum on all ceilings, R-16 in interior walls, R-19 in exterior walls, R-19 in floors and R-9 in basements around Kanab. Values increase with elevation.
 5. Roof details
 6. Electrical, plumbing, mechanical, and gas.
 6. Shear walls with tie downs
 8. Porch, entry, stairs, etc., details where they occur referenced from floor, foundation and plat plans. Show sizes and justify specified snow load.
 9. Material schedules, general notes
 10. Any other detail that needs to be included.
- E. **Wildland Urban Interface (WUI) Plan (two copies).** More information and general requirements will be discussed further in the packet. WUI roads and driveways must be designed to the Kane County Standard Specification and Drawing Details. This document can be downloaded at www.kane.utah.gov. Once you are at the website go to Departments, Land Use Authority, and Forms and Downloads.
- F. **Owner/Builder Certificate.** This was explained on the first page.
- G. **Septic Permit.** Clearance from the Health Department for septic system prior to issuance of permit. Please include a copy of septic system permit. Phone numbers and address will be provided at the end of the packet.
- H. **Locate and Stake Property Corner Pins.** All property corners must be visibly marked so we can check the set back requirements. If the corner pins cannot be found or they don't appear to be correct the owner must have the property surveyed.
- I. **Proof of Water.** This will coincide with the Land Use Authority's requirement.
- J. **Res and/or Com Check (two copies).** This report must be provided to insure the property meets or exceeds the energy provisions outlined in code. For minimum code requirements see www.kane.utah.gov, building department, forms and downloads and International Energy Conservation Code. A free Res & Com Check program can be downloaded off the internet at www.energycodes.gov.

Land Use Authority

- A. **Parcel Properly Subdivided.** To be reviewed by the Land Use Authority Administrator for subdivision compliance.
- B. **Recorded Means of Access minimum 28 ft.** Parcels outside of subdivisions need to furnish recorded proof of an easement or right of way to the property that meets the minimum standards.
- C. **Approved Water Supply.** Well must be drilled and functional prior to issuance of a building permit. A 2,000 gallon storage tank is also recommended.
- D. **Site Plan.** See building departments description above.
- E. **Land Use Zone.** Call the Land Use Authority Administrator if you are unsure of your zoning.
- F. **Dry Subdivisions Requirements.** See the Land Use Ordinance for additional information.

Building permits are required for any type of building in Kane County. No building or structure regulated by Kane County Ordinance and any of the current adopted building codes shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted, or demolished unless a separate permit for each building has first been obtained from the building official. Any excavation of county right of way, or county roads, requires a permit available through the GIS/Transportation department.

If work is not started on a structure or building within 180 days from the issuance of a permit or such work is suspended or abandoned for a period of 180 days, the permit shall become invalid. If work is not performed within the 180 day period you may extend the permit for a fifteen dollar fee before the permit expires. The extension shall be requested in writing and justifiable cause demonstrated. If you let the permit expire all work must stop until you either renew the permit for a one hundred dollar fee, within 30 days of it expiring, or obtain a new permit. If you fail to do so a “Notice of Non-Compliance” will be filled with the Kane County Recorder, stating we were unable to verify code compliance, and the matter will be turned over to the office of the Kane County Attorney for further action. A “Notice of Non-Compliance” can have a negative impact on, but not limited to, insurance claims, property resale and property financing. If you let the permit expire and obtain a new one you will at that time have to follow any and all new changes to the Kane County Ordinance and adopted building codes.

Building Inspections

24 hours notice is required for all inspections. Occasionally the building inspector can schedule an inspection the same day it is called for; however, this is not always the case. After the inspection is completed, if work **is not** marked “Approved” on the inspection form, make the corrections noted in the remarks section of the form and call for another inspection before continuing work. It is fairly common for builders to order cement and then call for an inspection. **We DO NOT recommend this practice.** Often the building inspector is booked and cannot make an inspection before the cement is due to arrive. If this happens the builder will be expected to cancel his order for cement. Pouring cement without an inspection will not be allowed. We recommend waiting until the inspection has been completed and approved before ordering cement.

Required Inspections & Information

1. **Footing & Set Back.** Inspect footing reinforcement before pouring concrete footings. When this inspection is performed, the property set-backs are checked to make sure all zoning property set-backs are correct.
2. **Foundation.** Inspect the foundation wall reinforcement before pouring concrete walls. We will inspect the foundation later for a damp proof coating.
3. **Underground Plumbing.** Inspect the underground plumbing before it is covered and the floor is poured.
4. **Shear Wall & Sheeting.** Inspect the shear wall and sheeting before they are covered by any house wrap or other material.
5. **4-Way.** Inspect the framing, rough plumbing, rough electrical, rough mechanical and rough gas.
6. **Insulation.** Inspect all insulation before it is covered by sheetrock or any other material.
7. **Drywall/Wallboard.** Inspect rough drywall before taping and applying drywall mud.
8. **Meter Base.** (if applicable)
9. **Lath.** (if applicable)
10. **Vapor Barrier/House Wrap.** Inspect vapor barrier/house wrap on exterior before applying siding or other finishes.
11. **Lag.** Inspect lag both roof and wall for manufactured homes.
12. **Jacks & Tie Downs.** Inspect tie downs and jacks on manufactured homes.
13. **WUI Final.** Inspect for Wildland Urban Interface compliance.
14. **Final Inspection.**

General Inspection Rules:

- Inspections must be scheduled 24 hours prior to the requested inspection.
- DO NOT cover up any required inspections until approved by the building official. Approval is granted after calling for and passing an inspection. Failure to do so will result in removal of coverings, or complete condemnation and abatement of work.
- All inspection tests are required. (Electrical, plumbing, mechanical, etc.)
- NO building can be occupied until a final inspection is passed and a certificate of occupancy is granted or a temporary occupancy permit is issued by the building inspector.
- All inspection cards, plans and manufacture's information and instructions must be on the job site during inspections.
- A permit allots a certain number of inspections. These include, but are not limited to, the required inspections and one re-inspect for each required inspection. The scope of the work will be the main determining factor when figuring the number of allotted inspections. If at any time during the project you exceed this allotted number of inspections you will be charged for each additional inspection until the project is completed.

Utah Wildland Urban Interface (WUI) General Information

Wildfire Mitigation... What is It?

Wildfire mitigation is the implementation of various measures designed to reduce the risk of destruction by wildfire. It involves modifying the environment surrounding a structure and the design and construction of a structure in order to increase its ability to withstand a wildfire without being dependent upon suppression resources.

Wildfire Mitigation... Who does it?

Anyone who owns a home or property in forested areas should consider the hazard presented to their property by a wildfire and should attempt to mitigate its effects. By doing wildfire mitigation work, homeowners can substantially **increase** their safety and **reduce** the risk to life and property. However, it should be noted that given the unpredictable nature and behavior of wildfire, **there are no guarantees**.

Wildfire Mitigation Plan

With an increasing number of structures being built in forested areas of Utah, the County is attempting to minimize the loss of lives and property from wildfires by including wildfire mitigation measures in the Site Plan Review process. Wildland Urban Interface lots are often located on steep hillsides where access may be difficult and little if any water is available for firefighting. They are usually covered with dense vegetation, many of which can burn in a dramatic and devastating manner, destroying homes in the process. The creation and implementation of a Wildfire Mitigation Plan is an important step towards remedying this situation. An acceptable Wildfire Mitigation Plan consists of two parts: 1) a site plan, showing the location and extent of structures and other improvements, the defensible space management zones around the structures, the driveway access for emergency vehicles, emergency water supply for fire fighting, and the locations of other specific natural and human created features; and 2) a narrative that describes in detail these same features. These considerations must be addressed along with all of the other considerations brought into the Site Plan Review process, such as tree preservation and re-vegetation. All wildfire mitigation conditions will be in addition to any applicable building code requirements.

Site Location

Demonstrate how the proposed construction site has been selected for the best location with respect to the natural characteristics and conditions of the property. Describe the location that has been chosen for the structure(s) with respect to the natural characteristics and conditions of the property. Include the following information:

1. Property location and access (public or private road).
2. Position of existing and/or proposed structure(s).
3. Lot size (acreage), slope (%), aspect (N, E, S, W), and elevation (feet).
4. Dangerous topographic features, such as valleys, saddles, steep slopes, and ridges.
5. Barriers to fire spread that could serve as a fuel break, such as major roads, rock outcroppings, bodies of water, riparian corridors, aspen stands.
6. Over story and under story vegetation types, densities, and conditions.
7. Percent ground cover: live vegetation, duff and dead wood, rock and soil.
8. Presence /absence of insect and/or disease infestations.

Construction Design and Materials

Show that the construction design and building materials selected will minimize the potential for the structure(s) to be ignited by a wildfire and will provide the best chance of defending the structure(s) from a wildfire. Include information on the:

1. Size and shape of the structure(s) (simple vs. complex); orientation (north-south, east-west)
2. Fire-resistance of construction materials (roofing and siding; windows and doors)
3. Size and construction of exterior features such as decks, balconies, and exterior stairs
4. Construction details for soffits and fascia; placement of venting; chimneys
5. Location of utilities (power and telephone; above or below ground), propane tanks (distance from structure and elevation), wells, leach fields, water storage tanks, etc.

Threat Reduction Zones

Describe how wildfire mitigation steps are being addressed in the various zones:

Access Zone: Information required includes:

1. Address: Should be readily visible from the street.
2. Road width and grade: Homes should be serviced by all weather access roads a minimum of 20 feet wide and all weather driveways at least 12 feet wide. Maximum grade of 12% or less if local fire equipment mandates. For more information on the roads and driveways see the Kane County Standard Specification and Drawing Details. This document can be downloaded at www.kane.utah.gov. Once you are at the website go to Departments, Land Use Authority, and Forms and Downloads.
3. Turnarounds/turnouts: Turnarounds are required for dead-end roads and on driveways in excess of 150 feet. Driveways in excess of 200 feet in length and less than 20 feet in width shall be provided with turnouts in addition to turnarounds.
4. Driveway clearance: Flammable vegetation should be removed extending 10 feet from both sides of the driveway. Driveways shall have an unobstructed height of 13 feet 6 inches.
5. Bridges and Culverts: Inadequately built bridges or culverts may prevent firefighting equipment from reaching your home. Check on engineering design if included in your project.

Defensible Space Zone: Demonstrate that defensible space is available and/or will be created around structures. Describe the steps that will be taken to modify the vegetation and protect the structure(s) from a future wildfire. Make considerations for the re-vegetation plan, tree preservation, and general forest health. Required defensible space distance is determined by completion of a “Fire Hazard Severity Form: included in the Utah Wildland-Urban Interface Code as completed by the authority having jurisdiction.

Fuel Modification Distances for each hazard area are:

1. Moderate hazard: 30 feet
2. High hazard: 50 feet
3. Extreme hazard: 100 feet

Trees are allowed in the defensible space, provided the horizontal distance between crowns of adjacent trees or unmodified fuel is not less than 10 feet. Where ornamental vegetative fuels or cultivated ground cover,

such as green grass, ivy, succulents or similar plants are used as ground cover, they are allowed be within the designated defensible space, provided they do not form a means of transmitting fire from the native growth to any structure. (2006 Utah WUI Code section 603)

Defensible spaces shall be maintained annually, or as necessary.

Additional fire protection requirements around the structure include:

1. Spark arresters: Chimneys serving fireplaces, barbeques, incinerators or decorative heating appliances shall be provided with a spark arrester.
2. Liquefied Petroleum Gas Installations: Installed and maintained according to the fire code.
3. Storage of Firewood and Combustible Materials: Shall not be stored in unenclosed spaces beneath buildings or structures, or on decks, or under eaves, canopies or other projections or overhangs. Should be stored a minimum of 30 feet from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet.

Built Zone: Buildings and structures shall be constructed in accordance with the *International Building Code* and additional Ignition-Resistant Construction Class requirements as determined by the Fire Hazard Severity Form for the project and specified in the WUI Code. Building requirements are available through the building department and from the applicable codes. The built zone is addressed during the building permit application process and plan review.

Interior Zone: This zone includes items that should be considered to prevent fires from originating in the home. Items to consider include:

1. Sprinkler Systems: A sprinkler system installed inside the home can provide effective fire protection. It will operate automatically and can extinguish a fire while you are asleep or away from home. It is especially effective in areas with less than ideal water supply and long emergency response distances.
2. Carbon Monoxide detectors: Use in conjunction with smoke detectors.
3. Escape plans: By planning and practicing exit drills, you can better prepare your family for a fire emergency.
4. Portable fire extinguishers.
5. Proper storage of flammable paint and stain products.
6. Proper installation and use of wood stoves and fireplaces.
7. Other heating systems: Kerosene and other fuel-fired heaters should be used properly.

WATER SUPPLY

Describe where an adequate and accessible water supply has been located for the defense of the structure(s) Include information on the:

1. Location of draft sources approved by the local fire protection agency (i.e. municipal hydrants, community cisterns, dry hydrants in local water sources) or the location, size, construction type and fittings for an individual cistern
2. Residential sprinkler system (if applicable)

Consult with the local water company on this item.

MAINTENANCE

In addition to the information presented in the above sections, you may also want to mention specific maintenance actions that will be undertaken in the future. This could include such things as:

1. Home maintenance: annual removal of debris from the roof and gutters and from around the house; regular cleaning of you chimney (if applicable).
2. Extending defensible space: additionally tree pruning, removing broken branches and disposing of slash; burning slash piles and firewood; checking for insect and disease problems; maintenance of a rock barrier; irrigation and mowing of green space.
3. Conducting a regular inspection of cistern and/or sprinkler systems (if applicable).
4. Maintenance of the access and driveway; checking address and road signs; planning escape routes.

WHY WILDFIRE MITIGATION

The State of Utah has witnessed major destructive wildfires in recent times. Increasing hazards and development in the wildland urban interface areas are threatening the States' and counties' abilities to prepare for and respond to wildfire. Yet many people still don't recognize the risk posed to their homes and properties by a wildfire and what they can do to mitigate that threat. Wildfires have always been a natural occurrence in Utah, but over the last 100 years, various land management practices, including fire suppression, has resulted in forests with vegetation densities 10 to 100 times their natural state. Combine this with factors such as steep terrain, drought, high summer-time temperatures, and seasonal high winds, and an increased human presence in the form of development and recreational use, the result is an environment prone to extreme wildfire behavior. These very dangerous conditions have lead to fires which are more numerous and devastating than ever before, challenging the abilities and resources of fire fighting agencies. Additionally, the response to a fire by emergency response organizations faced with these conditions is also limited by factors such as the amount of equipment and personnel available, number and location of water sources, difficulty or ease of access, and number and types of structures present. By completing wildfire mitigation work, creating defensible space and performing routine maintenance around homes, homeowners are giving firefighters and themselves the best chance to defend their property form wildfires.

Conclusion

This permit packet contains, but is not limited to, the minimum requirements need to obtain and hold a building permit. If at any time you have any concerns or questions about construction and the permit process for your project please contact our office Monday-Friday in person or by calling 435-644-4985.

Contacts for the following Southwest Health Departments:

Cedar City	245 South 200 East
435-586-2437	Kanab, Utah 84741
	435-644-2537

285 West Tabernacle
St George, Utah 84770
435-673-3528

Contacts for the Kane County Land Use Authority:

180 West 300 North
Kanab, Utah, 84741
435-644-4901